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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,127	01/30/2002	Gangadhar D. Bhat	PW 0249729 P12821	9738

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EXAMINER

VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/060,127	Applicant(s) BHAT, GANGADHAR D.	
	Examiner Thong H Vu	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/02</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-31 are pending.
2. The Preliminary Amendment filed 1/22/03 has been accepted and recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-31 are rejected under 35 U.S.C. 102(e) as anticipated by McCullough et al [McCullough, 2002/0010866 A1].

3. As per claim 1, McCullough discloses A system to facilitate data transfer between a server and a client [McCullough, Internet, Fig 4, paragraph 0047], comprising:

at least one server network to communicate data via a first Input/Output (I/O) architecture [McCullough, NAS servers, paragraph 0013];

at least two Virtual Network Interface Cards (VNICs) to communicate the data via the first I/O architecture [McCullough, a plurality of inferior virtual circuits, paragraph 0055; page 10, claim 1];

a client network to communicate data via a second I/O architecture [McCullough, gateway connected to local network, Fig 4];

at least two bridging devices (i.e.: gateways) to convert packets useable in the first I/O architecture to packets useable in the second I/O architecture, wherein no more

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than one of the at least two bridging devices transfers the data with any one of the at least two VNICs, and the at least two bridging devices transfer the data with the client network [McCullough, Gateway Initiator and Responder, Fig 4, paragraph 0054; translation, paragraphs 0096,0098,0099,0104,0106; the primary and secondary connections, paragraph 0013]; and

at least one intermediate driver to bind to the at least one server network and to the at least two VNICs [McCullough, device driver, paragraph 0119], wherein the at least one intermediate driver provides a fail-over function to maintain a connection between the server network and the client network [McCullough, a dropped or failed connection can be re-established, paragraph 0024].

4. As per claim 2, McCullough discloses the first I/O architecture is an Infiniband architecture as a design choice.

5. As per claim 3, McCullough discloses the second I/O architecture is an Ethernet architecture [McCullough, Ethernet, paragraph 0110].

6. As per claim 4, McCullough discloses the at least one intermediate driver provides at least one of Internet Protocol Security (IPSec), and Virtual Local Area Network (VLAN) protocol [McCullough, IPsec, paragraph 0049].

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7. As per claim 5, McCullough discloses the at least one intermediate driver binds to the at least one server network via at least one miniport instance [McCullough, multi-ports, paragraph 0114].

8. As per claim 6, McCullough discloses the client network includes at least one switch utilizing the second I/O architecture [McCullough, multi-ports repeater, paragraph 0114].

9. As per claim 7, McCullough discloses when an error occurs during data transfer between the one of the at least two bridging devices and the switching device, an error message is sent to one of the at least two VNICs corresponding to the one of the at least two bridging devices having the error [McCullough, errors, paragraph 0113,0115.

10. Claims 9-14,,16-22,24-30 contain the similar limitations set forth in apparatus claims 1-7. Therefore claims 9-14,,16-22,24-30 are rejected for the same rationale set forth in claims 1-7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8,15,23,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough et al [McCullough, 2002/0010866 A1] in view of Morales [5,987,526].

11. As per claim 8, McCullough does not explicitly detail the fail-over function terminates a connection between the one of the at least two bridging devices having the error and the one of the at least two VNICs corresponding to the one of the at least two bridging devices having the error, and initiates a connection between an alternative one of the at least two bridging devices and an alternative one of the at least two VNICs.

It was well-known in the art that a switch/router/gateway with plurality of virtual connections is used for backup (i.e.: failover) such as Morales teaching [Morales abstract, col 2 line 12-col 3 line 12; col 5 line 7-col 9 line 42].

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the technique for rerouting the traffic over the second virtual connection when the first virtual connection was failed into the McCullough's apparatus in order to utilize the plurality of virtual circuits. Doing so would provide flexibility and reliability to the network management services.

12. Claims 9,15,23,31 contain the similar limitations set forth in apparatus claim 8. Therefore claims 9,15,23,31 are rejected for the same rationale set forth in claim 8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM-4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (571) 272-3896. The fax number for the organization where this application or proceeding is assigned is 703-872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thong Vu
Patent Examiner
Art Unit 2142

A handwritten signature in black ink, appearing to read 'Thong Vu', with a horizontal line underneath it.